WE CLAIM:

1. A loader assembly comprising:

(a) a boom arm comprising:

(i) a tower comprising a plurality of first hydraulic fluid coupler members;

(ii) a lift arm that rotates relative to the tower about a tower/lift arm rotation pin;

(iii) at least one hydraulic cylinder; and

(b) a bracket assembly comprising:

(i) a stationary bracket comprising a plurality of second hydraulic fluid coupler members, the stationary bracket being constructed for attachment to a motor vehicle and attachment to the tower to provide a fluid connection between the first coupler members and the second coupler members; and

(ii) a rotating bracket that rotates relative to the stationary bracket about a bracket rotation pin, the rotating bracket being constructed to receive the tower and rotate the tower for attachment to the stationary bracket.

2. A loader assembly according to claim 1, wherein:

(a) the tower comprises an upper block having the plurality of first hydraulic fluid coupler members extending there through; and

(b) the stationary bracket comprising a lower block having the plurality of second hydraulic fluid coupler members extending there through.

3. A loader assembly according to claim 2, wherein the upper block and the lower block each comprise a nesting surface having a three dimensional configuration that resists twisting when the upper block and the lower block nesting surfaces are nested together.

4. A loader assembly according to claim 2, wherein the upper block comprises a centering pin and the lower block comprises a centering pin hole for receipt of the centering pin.

5. A loader assembly according to claim 1, wherein the tower comprises a guide pin, and the rotating bracket comprises a guide pin slot for receipt of the guide pin.

6. A loader assembly according to claim 1, wherein at least one hydraulic cylinder comprises a lift cylinder that rotates the lift arm relative to the tower, and an attachment cylinder that operates an attachment relative to the lift arm.

7. A loader assembly according to claim 6, wherein the boom arm comprises hydraulic lines that extend from the first hydraulic fluid coupler members to the hydraulic cylinder.

8. A loader assembly according to claim 7, wherein the hydraulic lines are concealed within the tower and the lift arm.

9. A loader assembly according to claim 6, wherein the boom arm comprises hydraulic lines that extend from the first hydraulic fluid coupler members to the attachment cylinder.

10. A loader assembly according to claim 9, wherein the hydraulic lines are concealed within the tower and the lift arm.

11. A loader assembly according to claim 1, wherein the boom arm comprises a loader stand that is constructed to extend from the loader arm for holding the loader assembly in a storage position.

12. A loader assembly according to claim 11, wherein the boom arm comprises a cable for releasing the loader stand from the boom arm so that the loader stand can move to the storage position.

13. A loader assembly according to claim 1, wherein the loader assembly further comprises:

(a) a corresponding boom arm comprising:

(i) a corresponding tower comprising a plurality of corresponding tower first hydraulic fluid coupler members;

(ii) a corresponding lift arm that rotates relative to the corresponding tower about a second tower/lift arm rotating pin;

(iii) at least one corresponding hydraulic cylinder; and

(b) a corresponding bracket assembly comprising:

(i) a corresponding stationary bracket comprising a plurality of corresponding stationary bracket second hydraulic fluid coupler members, the corresponding stationary bracket being constructed for attachment to a motor vehicle and attachment to the corresponding tower to provide a fluid connection between the corresponding tower first hydraulic fluid coupler members and the corresponding stationary bracket second coupler members; and

(ii) a corresponding rotating bracket that rotates relative to the corresponding stationary bracket about a corresponding bracket rotation pin, the corresponding rotating bracket being constructed to receive the corresponding tower and rotate the corresponding tower for attachment to the corresponding stationary bracket.

14. A loader assembly according to claim 13, wherein the loader assembly further comprises a stabilizing arm extending between the lift arm and the corresponding lift arm.

15. A loader assembly according to claim 14, wherein the loader assembly further comprises hydraulic lines extending through the tower and the lift arm, and

hydraulic lines extending through the corresponding tower and the corresponding lift arm, and hydraulic lines extending through the stabilizing arm.

16. A combination motor vehicle and loader assembly comprising:

a motor vehicle having a forward end; and

a loader assembly attached to the motor vehicle forward end comprising:

(a) a boom arm comprising:

(i) a tower comprising a plurality of first hydraulic fluid coupler members;

(ii) a lift arm that rotates relative to the tower about a tower/lift arm rotating pin;

(iii) at least one hydraulic cylinder; and

(b) a bracket assembly comprising:

(i) a stationary bracket attached to the motor vehicle forward end, the stationary bracket comprising a plurality of second hydraulic fluid coupler members attached to the first hydraulic fluid coupler members and providing fluid connection between the first hydraulic fluid coupler members and the second hydraulic fluid coupler members; and

(ii) a rotating bracket that rotates relative to the stationary bracket about a bracket rotation pin, the rotating bracket being constructed to receive the tower and rotate the tower for attachment to the stationary bracket.

17. A combination motor vehicle and loader assembly according to claim 16, wherein the motor vehicle comprises a tractor.

18. A method for attaching a loader assembly to motor vehicle, the method comprising:

providing a loader assembly in a storage position, wherein the loader assembly comprises:

(a) a boom arm comprising:

(i) a tower comprising a plurality of first hydraulic fluid coupler members;

(ii) a lift arm that rotates relative to the tower about a tower/lift arm rotating pin;

(iii) at least one hydraulic cylinder; and

(b) a bracket assembly comprising:

(i) a stationary bracket comprising a plurality of second hydraulic fluid coupler members, the stationary bracket being constructed for attachment to a motor vehicle and attachment to the tower to provide a fluid connection between the first coupler members and the second coupler members; and

(ii) a rotating bracket that rotates relative to the stationary bracket about a bracket rotation pin, the rotating bracket being constructed to receive the tower and rotate the tower for attachment to the stationary bracket; and

moving the motor vehicle forward so that the tower contacts the rotating bracket.

19. A method according to claim 18, further comprising attaching the plurality of first hydraulic fluid coupler members to the plurality of second hydraulic fluid coupler members to provide a fluid connection between the plurality of first hydraulic fluid coupler members and the plurality of second hydraulic fluid coupler members.

20. A method according to claim 18, further comprising a step of locking the tower to the stationary bracket.

21. A method according to claim 18, further comprising providing an attachment attached to the lift arm wherein at least one hydraulic cylinder comprises an attachment cylinder that attaches to the lift arm and the attachment, and operating the attachment cylinder to move a stand attached to the lift arm from a storage position to a working position.

22. A hydraulic cylinder comprising:

(a) a barrel having a barrel first end comprising a gland having a ram opening, and a barrel second end comprising a cap;

(b) a ram extending through the ram opening and comprising:

(i) a ram first end comprising a hydraulic fluid extension port and a hydraulic fluid retraction port;

(ii) a ram second end comprising a piston, wherein the piston is positioned between the gland and the cap to provide an extension area between the piston and the cap and a retraction area between the gland and the piston; and

(iii) a ram tube and an inner tube extending from the ram first end to the ram second end, wherein the ram tube and the inner tube are configured to provide an extension conduit and a retraction conduit, the extension conduit extending between the hydraulic fluid extension port and the extension area to provide fluid communication between the hydraulic fluid extension port and the extension area, and the retraction conduit extending between the hydraulic fluid retraction port and the retraction area to provide fluid communication between the hydraulic fluid retraction port and the retraction area.

23. A hydraulic cylinder according to claim 15, wherein the barrel comprises a trunion.

24. A hydraulic cylinder according to claim 15, wherein the ram first end comprises a cap attached to the ram tube and the inner tube.

25. A hydraulic cylinder according to claim 15, wherein the hydraulic fluid extension port is provided within the cap, and the hydraulic fluid retraction port is provided within the ram tube.

26. A hydraulic cylinder according to claim 18, wherein the ram second end comprises a ram cap that attaches the piston to the ram tube and the inner tube and

provides fluid communication between the retraction conduit and the retraction area and between the extension conduit and the extension area.

27. A hydraulic cylinder comprising:

(a) a ram having a ram first end and a ram second end, the ram first end comprising a piston; and

(b) a barrel comprising:

(i) a barrel first end comprising a gland and a gland opening wherein the ram extends through the glad opening so that the piston is within the barrel;

(ii) a barrel second end comprising a cap having a hydraulic fluid extension port and a hydraulic fluid retraction port;

(iii) an outer barrel and an inner barrel, extending between the barrel first end and the barrel second end wherein the outer barrel and the inner barrel are configured to provide an extension conduit to provide fluid communication between the hydraulic fluid extension port and an extension area provided between the piston and the cap, and a retraction conduit for providing fluid communication between the hydraulic fluid retraction port and the retraction area provided between the piston and the gland.

28. A hydraulic cylinder comprising:

(a) a barrel comprising a barrel first end and a barrel second end, the barrel first end comprising a back cap having an extension port and a retraction port, and the barrel second end comprising a gland;

(b) a ram having a ram first end and a ram second end, the ram first end comprising a large piston wherein the large piston is sized to slide within the barrel; and

(c) a center line having a center line first end, a center line second end, and an internal conduit, the center line first end provided attached to the back cap and providing fluid communication between the retraction port and the internal conduit, and the center line second end comprising a small piston wherein the small piston is sized to slide within the ram.

29. A hydraulic cylinder according to claim 28, wherein the hydraulic cylinder comprises an extension area between the back cap and the large piston, wherein the extension area is in fluid communication with the extension port.

30. A hydraulic cylinder according to claim 28, wherein the hydraulic cylinder comprises a retraction space comprising a center line retraction space and a ram retraction space, wherein the center line retraction space and the ram retraction space are provided in fluid communication with the internal conduit.

31. A hydraulic cylinder according to claim 28, wherein the ram second end comprises a bushing.

32. A loader assembly comprising:

(a) a left boom arm comprising a left tower, a left lift arm constructed to rotate relative to the left tower about a left tower/left lift arm rotation pin, a left lift cylinder attached to the left tower and the left lift arm to cause the left lift arm to rotate relative to the left tower;

(b) a right boom arm comprising a right tower, a right lift arm constructed to rotate relative to the right tower about a right tower/right lift arm rotation pin, a right lift cylinder attached to the right tower and the right lift arm to cause the right lift arm to rotate relative to the right tower;

(c) at least one stabilizing arm extending between the left lift arm and the right lift arm, and comprising an interior region; and

(d) hydraulic lines extending through the interior region of the stabilizing arm.

33. A loader assembly according to claim 32, wherein the left boom arm comprises a left attachment cylinder attached to the left lift arm and constructed to attach to an attachment, and the right boom arm comprises a right attachment cylinder attached

to the right lift arm and constructed to attach to an attachment, and wherein the hydraulic lines extending through the stabilizing arm are provided for powering the left attachment cylinder and the right attachment cylinder.

34. A loader assembly according to claim 32, wherein the hydraulic lines extending through the stabilizing arm are provided for powering the left lift cylinder and the right lift cylinder.

35. A loader assembly according to claim 32, wherein the left lift arm comprises an interior region and the right lift arm comprises an interior region, and wherein the hydraulic lines extending through the interior region of the stabilizing arm extend through the interior region of the left lift arm and the interior region of the right lift arm.